INSTALLATION AND OPERATING INSTRUCTIONS

1.0 Important information
In order to ensure complete and effective operation and for your own safety, all of the following instructions should be read carefully and observed.
This document should be regarded as part of the product and as such should be kept accessible and durable to ensure the safe operation of the fan. All product-related safety regulations must be observed.
These installation instructions cannot take all installation, operating and maintenance conditions into account. You can obtain further information from your local dealer or the product data sheet, which can be downloaded on the internet.

1.1 SAFETY INSTRUCTIONS
Special regulations apply for use, connection and operation; consultation is required in case of doubt. Further information can be found in the relevant standards and legal texts.
⚠ The following points must be observed before any cleaning, maintenance and installation work:
- Isolate device from the mains power supply and secure against being switched on again!
- After switching off, a waiting time of 5 min. must be observed, as dangerous voltages may be present after disconnection from the mains due to internal capacitors!
- Non-observance, touching live electrical parts or improper use of this power supply unit can result in death, serious injuries or significant material damage.
- All product-related safety reg. must be observed! Further country-specific regulations must also be observed.

1.2 Application
This compact, fully encapsulated switching power supply is solely designed as a decentral power supply for the Uno hab unit for installation in a flush-mounted box.
Further information can be found in section 3.0 “Installation”.
– Normal use:
The Uno hab PSF power supply unit is only approved for fixed installation inside buildings in a flush-mounted box. The maximum permissible ambient temperature can be found on the type plate.

– Reasonably foreseeable misuse:
The power supply unit is not suitable for operation under difficult conditions, such as high levels of humidity, aggressive media, long standstill periods, heavy contamination, excessive loads due to climatic, technical or electronic influences. The same applies for the mobile use of fans (vehicles, aircraft, ships, etc.). Usage under these conditions is only possible with approval from Airflow, as the standard version is not suitable in this case.
– Improper, prohibited use:
Any use other than the intended use is not permitted! The conveying of solid matter or solid matter content > 10µm in air and liquid is not permitted!

1.4 Personnel qualification
⚠ DANGER!
The electrical connection and start-up must only be carried out by qualified electricians.
Installation, servicing and maintenance of the fan must only be carried out by qualified electricians. Uno hab individual room ventilation units can be used by children over the age of 8 as well as persons with physical, sensory, or mental disabilities or lack of experience and knowledge, if they are supervised or instructed with regard to the safe use of the unit and they understand the resulting risks. Children must not play with the unit. Cleaning or user maintenance must not be carried out by unsupervised children.

1.4 Scope of delivery
The delivery includes the switching power supply
Uno hab PSF / Part Number: 90000996

2.0 Warranty claims – exclusion of liability
If the following instructions are not observed, our warranty shall be invalidated. The same applies to liability claims against Airflow. The use of accessory parts, which are not recommended or offered by Airflow, is not permitted. Any possible damages are not covered by the warranty.

2.1 Certificates - guidelines
If the product is installed correctly and used to its intended purpose, it conforms to all applicable EU guidelines at its date of manufacture.

2.2 Shipping
The power supply unit is packed ex-works in such a way that it is protected against normal transport strain. Carry out the shipping carefully. It is recommended to leave the power supply unit in the original packaging until required.

2.3 Receipt
The shipment must be checked for damage and correctness immediately upon delivery. If there is any damage, promptly report the damage with the assistance of the transport company. If complaints are not made within the agreed period, any claims could be lost.

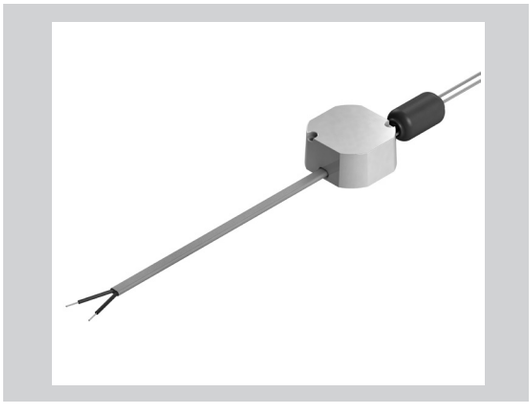
3.0 Installation

- During operation, the power supply unit must not be accessible.
- A suitable flameproof casing must be provided in the end product.
- Sufficient cooling must be ensured.
- The maximum surface temperature must not be exceeded.

The casing fulfils the requirements of IP 67 and it is fully protected against dust and penetrating humidity.
The power supply units are intended for installation in deep (61 mm) flush-mounted boxes with a 68 mm diameter (fire resistance 850°C according to VDE 0606).
The connection can be made via the connecting wires with suitable terminals.

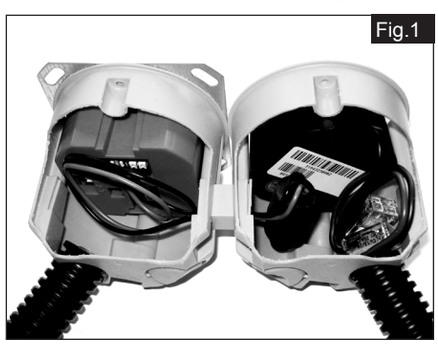
Connecting cables:
Input side: 0.8 mm² (black - white) with outer sheath, wire end ferrule
Output side: 0.52 mm² (black - red) tin-plated

3.1 Electrical connection / start-up
⚠DANGER
Touching live parts will result in electric shock. Only connect with no voltage present!
– The electrical connection and initial start-up are to be carried out in accordance with the relevant wiring diagrams and are only to be carried out by a certified electrician.
– The relevant standards, safety regulations (e.g. DIN VDE 0100, EN 50178), as well as the technical connection conditions of energy suppliers are to be adhered to!
– A multipole mains section switch/isolator, with a minimum contact opening of 3 mm (VDE 0700 T1 7.12.2 / EN 60335-1) is mandatory!
– The power supply and the supply network must be sufficiently fused.



– The network connection must comply with IEC 62103, EN 50178 and IEC 60364, VDE 100
– Network configuration, voltage and frequency must be consistent with the rating plate information.
– The supply cable must be introduced, so that no water can get in along the cable in case of water exposure.
– Never work on the power supply unit when it is live! There is a risk of electric arcs and electric shock which can result in death, serious injuries or significant material damage.

⚠ Warning:
Dangerous voltages and components with significant amounts of stored energy may be present during normal power supply unit operating conditions. However, they are not accessible.
Improper use can result in electrical shock or significant burns! Keep away from fire and water!
The power supply unit must be connected according to wiring diagram SD-3 (1 power supply unit), or SD-4 (2 parallel power supply units) depending on the configuration.

Fig.1


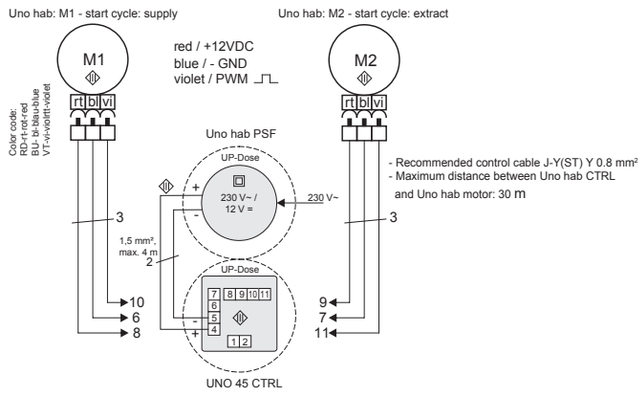
⚠ Attention!
A ferrite is mounted on the output side of the power supply unit. This is a component of the power supply unit and it is required to ensure correct functionality. The ferrite must not be removed.
The input and output cables must be installed so that they are clearly separated from one another (see Fig. 1). Ideally, position the ferrite at a distance of approximately 1 cm behind the power supply unit. Install the cables without twisting. The cables must not cross each other and must be shortened accordingly.
All wiring terminals must comply with DIN EN 60998. These terminals must be designed for a temperature range from 85 °C and a voltage of 300 V.
Terminal recommendation: Wago Type 221

4.0 Technical data

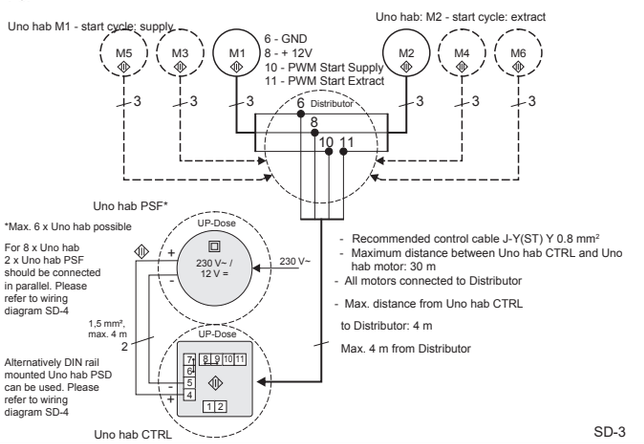
Input voltage	230 V AC / 0,24 A	50 / 60 Hz
Operating voltage range	207-253 V AC	47-63 Hz
Output voltage	12.0 V DC / 1.9A	23 W
Integrated over temperature protection		
Overload protection, current limiter	> 2.5 A	
Internal primary fuse	2 A/T	
External line fuse	6-10 A	
Power loss standby	max. 0.5 W	
Short-circuit protection	Output side, automatic restart	
Overvoltage protection	Output side, snap-in, mains disconnection required	
Ambient temperature range	-5 °C to +40 °C or	
Max. surface temperature at Tc point	+85 °C	
Relative humidity	5-95 % (non-condensing)	
Storage tempature	-40 °C to 85 °C	
Safety:		
Input side	Protection class II	
Output side	Protection class III Safety extra-low voltage SELV compliant	
Safety approval	acc. to EN60950-1 and EN60335-1	

Fig.2

Operation with 2 x UNO hab units and 1 x Uno hab PSF



Operation with up to 6 x Uno hab and 1 x Uno hab PSF



5.0 Repair and maintenance

⚠ DANGER

Touching of live electrical parts can cause an electrical shock. Isolate device from the mains power supply and secure against being switched on again!

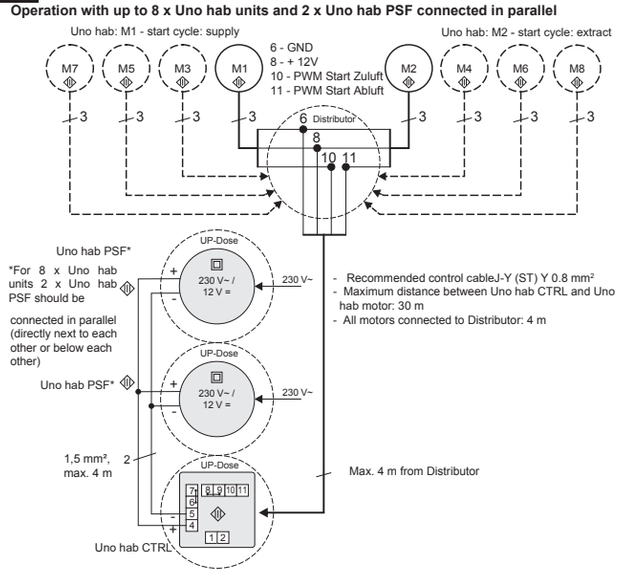
Maintenance is not provided for the power supply unit and the unit must be fully replaced in case of defects!

6.0 Disposal

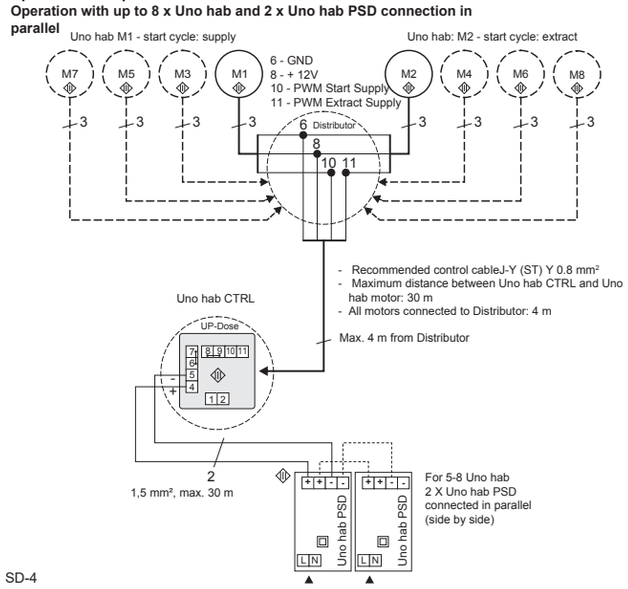
Packaging must be correctly disposed of. The electrical devices must be returned to collection points for recycle of electrical and electronic waste. According to § 12 of the Battery Directive (BattV), accumulators and batteries must be returned to the manufacturer or an appropriate collection point. Electrical devices, accumulators and batteries may not be disposed of with household waste.

Fig.3

Operation with up to 8 x Uno hab units and 2 x Uno hab PSF connected in parallel



Operation with up to 4 x Uno hab and 1 x Uno hab PSD or
Operation with up to 8 x Uno hab and 2 x Uno hab PSD connection in parallel



80000779 - Issue 1 04/19

AIRFLOW®
Airflow Developments Limited
Aidelle House, Lancaster Road,
Cressex Business Park,
High Wycombe, Buckinghamshire,
United Kingdom, HP12 3QP
E-mail: info@airflow.com
Telephone: +44 (0) 1494 525252
airflow.com

Certificate No. EMS 569454 BS EN ISO 14001 : 2015
Certificate No. FM 00152 BS EN ISO 9001 : 2015